Alternative Energy by Henry So

Alternative energy can be an interesting issue. Alternative energy is a form of energy that is renewable, does not use up Earth's natural resources, such as oil, and is environmentally safe to use. The use of alternative energy is important because the Earth's natural substances, such as oil, are very limited and take years to replace. One type of safe and renewable energy is solar energy. Another alternative, but unstable, energy is nuclear energy. For the city of Marlborough, solar energy is much more efficient, and can be used commercially and privately. The two alternative energies solar and nuclear can be used in very different ways.

Alternative energy is a form of energy that is renewable, and is not harmful to the environment of Earth because they do not release carbon dioxide into the atmosphere, and do not use up Earth's natural resources. A type of non-renewable energy that is limited to the Earth is coal. This cannot be regenerated easily, and takes years and years to do such. However, thanks to the idea of using alternative energies, we no longer need to worry too much about sucking up Earth's natural substances at a high rate. Solar panels grouped together can help save thousands of people with the cheap and easy-to-obtain electricity it produces. Few environmental actions like this can help give us the energy we need.

We need alternative energy because humans burn Earth's precious fossil fuels that we cannot get back. Factories and other commercial buildings give off extreme amounts of smoke that is very harmful to the atmosphere because they pollute it with carbon dioxide filled gases. Alternative energy is needed to stop this damage to the atmosphere before we completely destroy it. As the atmosphere and ozone layer are deteriorating fast, alternative energies such as solar energy can assist in reducing this rate.

One type of beneficial and very common type of power is solar energy. In the article "Energy from the Sun...Solar Power," it explains that solar energy is a type of energy that is derived from the sun by capturing the energy with solar panels. There is a company that sells solar generators privately, and this company provides power in the event of a blackout or storm that kills the power in a home or building. The solar generator is portable, so it can be transported anywhere where the owner can go. Using this generator can aid in the reduction of fossil fuels, which helps the atmosphere, and keep it free from pollution. The use of solar energy is safe and clean, and unlike a popular natural resource, oil, it does not have to be refined from dirt with filters when the energy is going to be converted to electricity. Solar energy is always there to use as long as the Sun keeps living. The use of solar energy is growing more and more, but another type of energy source can also challenge this resource in the production of power.

A type of efficient, but controversial, energy is nuclear energy. This type of alternative energy is one where enormous reactors generate electricity by using nuclear sources. As its name suggests, this energy is unstable and can cause serious damage if not handled in the proper way. The radiation can cause painful diseases, so the gigantic reactors that produce it must be built to

keep the generators safe. When getting rid of the horrible waste nuclear radiation gives off, the waste must be boxed and buried in glass boxes to keep the waste from exposing itself to humans and other forms of life. Gamma rays are a type of radiation that is very harmful, and penetrate matter quite easily and effortlessly, and can only be shielded by lead. This is why lead is used in the bricks in a reactor when it gives off gamma rays. Poland, as an example, is one of many countries that look into this alternative energy, and looks into using this energy for about 9.3% off the power they produce, and reduce the use of coal by 2030. Because Poland is not very experienced with the production of nuclear energy, South Korea is assisting this country so that the waste is treated and disposed of properly. This shows how countries are being converted from fossil fuels to alternative energy, and guiding each other so Earth can hold itself together for as long as possible. Nuclear, solar, and other alternative energies are becoming more and more common, but I think solar energy would be more suitable for the city of Marlborough.

The Earth's glaciers are melting because of greenhouse gases, so I think the city of Marlborough should use safe and clean solar energy to help stop these gases from polluting the atmosphere. Nuclear energy requires ginormous reactors to produce electricity, whereas solar panels simply need to be hooked up and positioned towards the sun during the day. Marlborough cannot obtain the space necessary to construct huge reactors, but it obviously can prop up a few solar panels on the roofs of buildings. Solar energy contains no waste at all, making the energy clean and safe. Nuclear energy produces unstable waste, and has to be treated and disposed of by storing it in glass containers, then buried underground. The people of Marlborough would most likely by frightened if they know their house might have been built on top of property with nuclear waste underground. Solar panels can be bought privately by a homeowner, which can give energy to said homeowner directly. Nuclear energy can only be bought through electric companies, so the homeowner has to get the electricity indirectly. I think that solar energy is better for Marlborough than nuclear energy, because of space, the toxic waste, and the fact that solar panels can be bought privately by the people of the city.

Solar and nuclear energy are just two of the alternative energies that help reduce the rate of toxic gases entering the atmosphere. Alternative energy is safe and renewable that acts as a substitute for fossil fuels. We need it to stop polluting the atmosphere and prevent the burning of fossil fuels. Solar energy is safe and clean, and nuclear energy also helps generate electricity without releasing greenhouse gases. I think solar energy is the best alternative energy for Marlborough to use. Using alternative energies can both help reduce using limited resources and stop releasing dangerous gases into the atmosphere.

Works Cited

"Amazing 'Solar Generator' Is Like Having A Secret Power Plant In Your Home!" *Countryside*& Small Stock Journal. Nov 2012.

"Energy from the Sun...Solar Power." Boys' Quest. Sep 2012

"Nuclear Energy." News 'n' More. Oct 2012

"Poland-South Korea Joint to Build Nuclear Power Plant." Arabia 2000. Aug 2010